DOCUMENT RESUME

ED 387 124 IR 017 353

TITLE	Education Technology Survey, 1995.
INSTITUTION	Malarkey-Taylor Associates, Inc., Washington, DC.; Quality Education Data, Inc., Denver, CO.
SPONS AGENCY	American Association of School Administrators, Arlington, Va.; Cable in the Classroom.; National Association of Elementary School Principals, Reston, VA.; National Association of Secondary School Principals, Reston, Va.; National Education Association, Washington, D.C.
PUB DATE	Jul 95
NOTE	32p.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Administrator Attitudes; Cable Television; Computers; *Educational Technology; *Electronic Equipment; Elementary Secondary Education; Media Specialists; Online Systems; *Principals; Surveys; *Teacher Attitudes; Use Studies
IDENTIFIERS	Barriers to Participation; Channel One; Internet

ABSTRACT

Primary research (in-depth telephone interviews) was conducted among elementary and secondary school educators in Spring 1995 to determine usage, attitudes, and barriers to usage for five electronic in-school services: Cable in the Classroom; computers, laserdisc or CD-ROM; Internet; online computer services such as America Online and Prodigy; and Channel One. A total of 1,000 educators with cable in schools were interviewed: 600 teachers and media coordinators, 300 principals, and 100 school district administrators. Survey data are analyzed for teachers and media coordinators separately from principals and administrators. Results show that: (1) in schools connected to cable, 85% of teachers and media coordinators used computers, laserdisc or CD-ROM, 58% used Cable in the Classroom programming, Internet and online services were used by 16% and 13% of teachers and media coordinators, respectively, and Channel One was used by 19%; (2) administrators and principals tended to underestimate the extent to which teachers and media coordinators were using electronic services; (3) factors such as lack of knowledge about the service, workshops or training, time to learn how to use, and access to cable, telephone or data lines were significant barriers; (4) well over half the respondents felt that online services and the Internet prepare young people for the information age, facilitate exchange of information between schools and learning centers, support schools and teachers through community services, and assist teachers' professional development; (5) educators' perceptions of each electronic service seemed to be influenced by the extent of their training; (6) Cable in the Classroom programming was considered much easier to use and more effective in teaching whole classes of students than either the Internet or online services, and was considered somewhat easier and more effective than computers, laserdisc, or CD-ROM; and (7) the most frequently used in-school television programming was provided by PBS (Public Broadcast System), the Discovery Channel, and CNN (Cable News Network). Eleven figures and one table illustrate data. (MAS)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 387 124

1995 EDUCATION TECHNOLOGY SURVEY

Prepared for:

National Education Association
National Association of Secondary School Principals
National Association of Elementary School Principals
American Association of School Administrators
Cable in the Classroom

Prepared By:

QUALITY EDUCATION DATA, INC.
1600 Broadway, 12th Floor
Denver, CO 80202
(303) 860-1832
&
MALARKEY-TAYLOR ASSOCIATES, INC.
1130 Connecticut Avenue, NW Suite 325
Washington, DC 20036
(202) 835-7800

July 1995

©Copyright 1995 Malarkey-Taylor Associates, Inc.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Samuel H. Book

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

IR017353

BEST COPY AVAILABLE

Conclusions

- In schools connected to cable:
  - 85% of teachers and media coordinators used computers, laserdisc or CD-ROM.
  - 58% used Cable in the Classroom programming during the school year.
  - Internet and online services were used by 16% and 13% of teachers and media coordinators, respectively.
  - Channel One was used by 19%.

- Administrators and principals tended to underestimate the extent to which teachers and media coordinators were using in-school electronic services. Specifically, school administrators estimated that 62% of teachers used computers and principals thought 68% of teachers used this resource.

- Factors such as lack of knowledge about the service, lack of workshops or training, lack of time to learn how to use, and lack of access to telephone, cable or data lines in the classroom were significant barriers to greater usage of computers, online services, Internet and Cable in the Classroom. Some 60% of educators felt these factors were barriers to greater usage of Cable in the Classroom while upwards of 80% felt they were barriers to greater usage of computers, online services and Internet. Lack of relevance to the curriculum and lack of motivation on teacher's part were not major barriers for greater usage of any of the electronic services.

- Well over half of the respondents felt that online services and Internet prepare young people for the information age, facilitate exchange of information between schools and learning centers, support schools and teachers through community services, and assist teachers' professional development.

- Educators' perceptions of each electronic service seemed to be influenced by the extent of their training. 81% of teachers and media coordinators who used computers had attended a workshop or received training in computers, and 56% and 51% of users had attended workshops or received training for Internet and online services.

- Cable in the Classroom programming was considered much easier to use and more effective in teaching whole classes of students than either Internet or online services, and Cable in the Classroom was thought to be somewhat easier to use and more effective than computers, laserdisc or CD-ROM.

- The most frequently used in-school television programming was provided by PBS, The Discovery Channel and CNN. Among those teachers and media coordinators who used Cable in the Classroom, 69% used PBS programming during the past school year, 58% used The Discovery Channel programs and 49% used CNN.

1. Introduction

Cable in the Classroom conducted primary research among elementary and secondary school educators in spring 1995 to determine usage, attitudes and barriers to usage for five electronic in-school services:

- Cable in the Classroom
- Computers, Laserdisc or CD-ROM
- Internet
- Online computer services such as America Online and Prodigy
- Channel One.

Quality Education Data (QED) was retained to conduct in-depth telephone surveys among systematic, stratified random samples of educators drawn from QED's comprehensive data base of American schools. Malarkey Taylor Associates (MTA) was retained to assist in designing the surveys and to analyze the data and prepare reports and presentations.

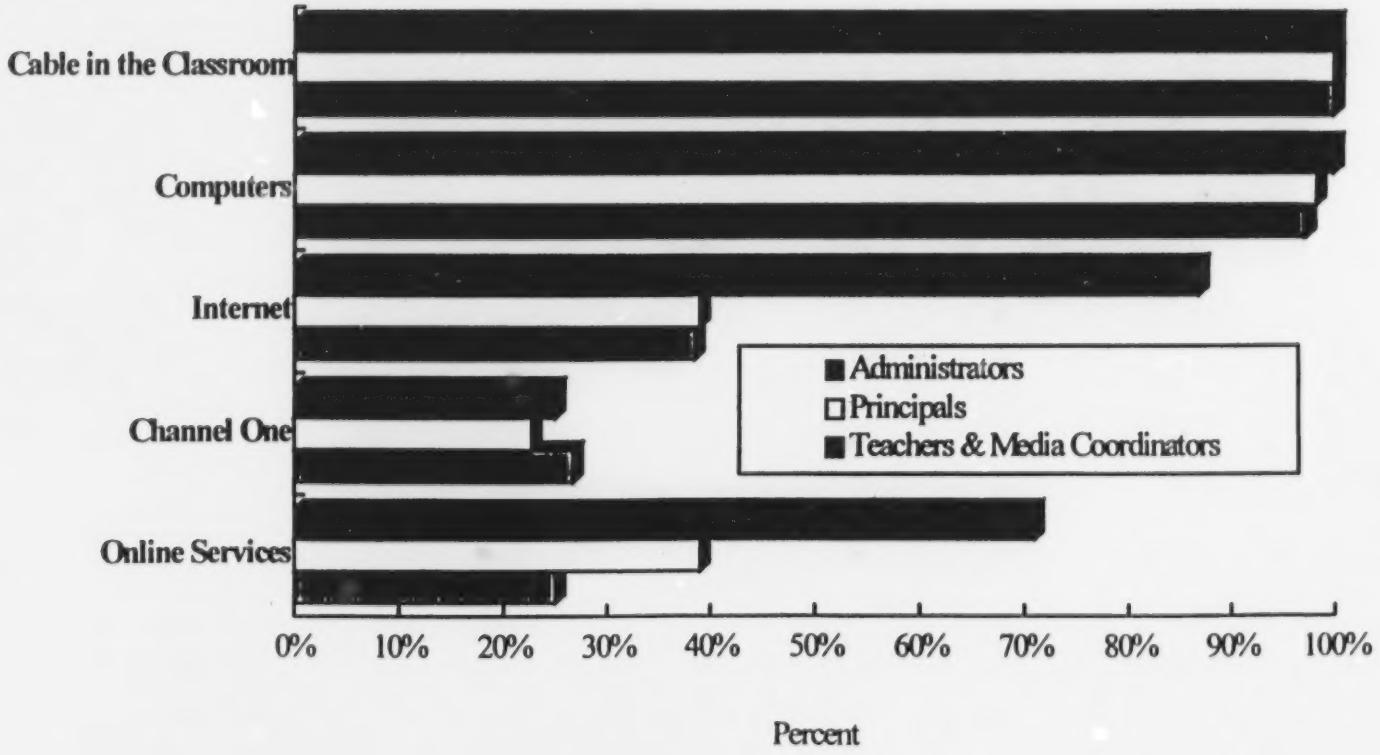
A total of 1,000 educators in schools with cable were interviewed in April 1995. Previous surveys conducted by QED and the National Center for Education Statistics show that 70% of all U.S. schools have cable. As shown in the following, representative samples of 600 teachers and media coordinators were surveyed, half in elementary schools and half in secondary schools; 300 principals were interviewed, half elementary, half secondary; and 100 school district administrators were surveyed.

Teachers and media coordinators were asked about their personal usage and barriers to usage of the five electronic services. Principals and administrators were asked about their teachers' usage and barriers to usage of the services. Survey data are analyzed for teachers and media coordinators separately from principals and administrators. Data derived from the samples of teachers and media coordinators are statistically projectable to the universe of U.S. teachers and media coordinators within a margin-of-error of ±4.1%, at the 95% confidence level.

Table 1. Sample Stratification

	Number of Respondents	
Teachers & Media Coordinators		
Elementary	300	
Secondary	300	
Total		600
Principals		
Elementary	150	
Secondary	150	
District Administrators	100	
Total		400
Total		1000

Figure 1.
Services available in your school

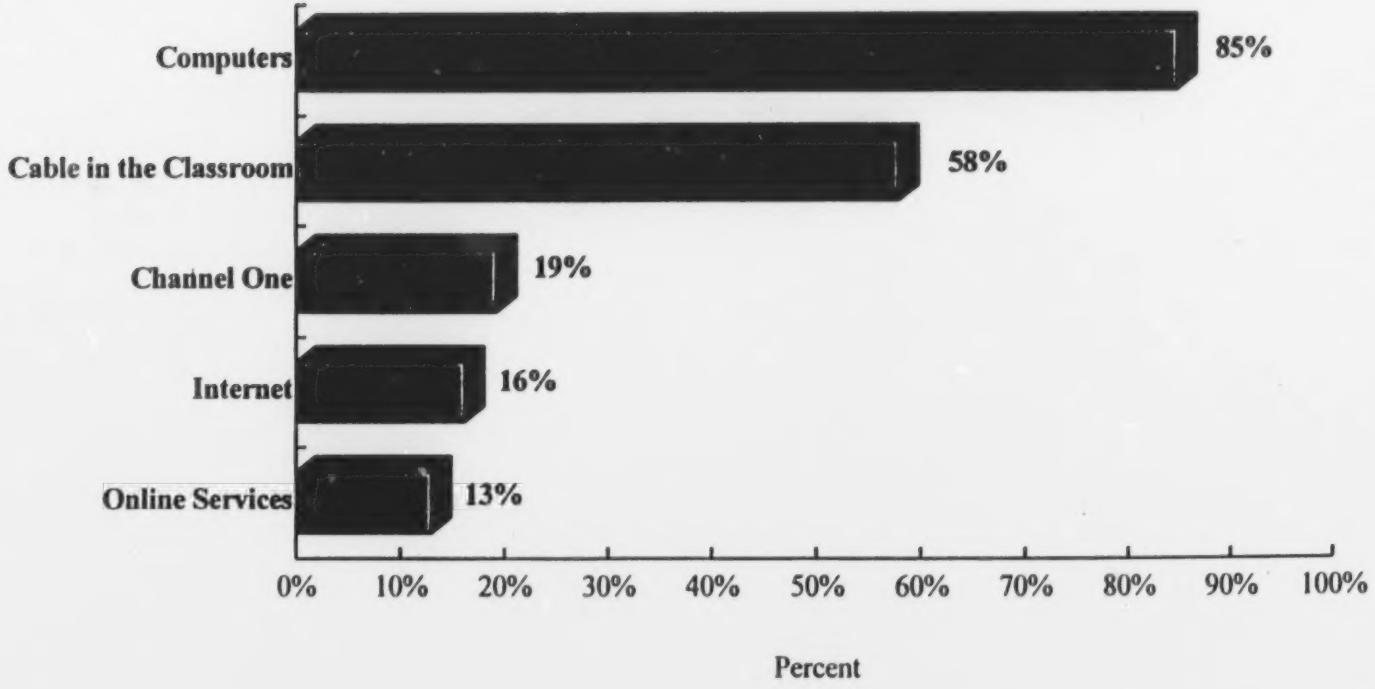


2. Usage of In-School Electronic Services

To determine the availability of electronic services in schools, educators were asked whether or not each service "is used in your school." Schools where Cable in the Classroom was not used were screened out of the surveys in order to obtain respondents from the over 70% of U.S. elementary and secondary schools that are connected to cable and able to use Cable in the Classroom programming. Over 95% of teachers and media coordinators, principals and administrators said that computers, laserdisc or CD-ROM are used in their schools (see Figure 1).

With regard to usage of electronic services, administrators and principals underestimated the actual use of electronic services for instruction. For example, when teachers and media coordinators were asked if they themselves used each service during the school year, 58% reported using Cable in the Classroom programming during the school year (see Figure 2) while administrators estimated that 43% of teachers used electronic services and principals estimated 48%. Computers, laserdisc or CD-ROM were used by 85% of teachers and media coordinators but only 62% and 68% of administrators and principals, respectively, estimated use by their teachers and media coordinators. In schools where Internet and online services were available, Internet was used by 42% [.16/.38] and online services were used by 52% [.13/.25].

Figure 2.
Services used for instructional purposes during this school year
(Teachers and Media Coordinators)



3. Usage of Cable in the Classroom Programming

Teachers and media coordinators who used Cable in the Classroom were asked how often they made use of cable channels featuring special non-commercial programming for in-school use.

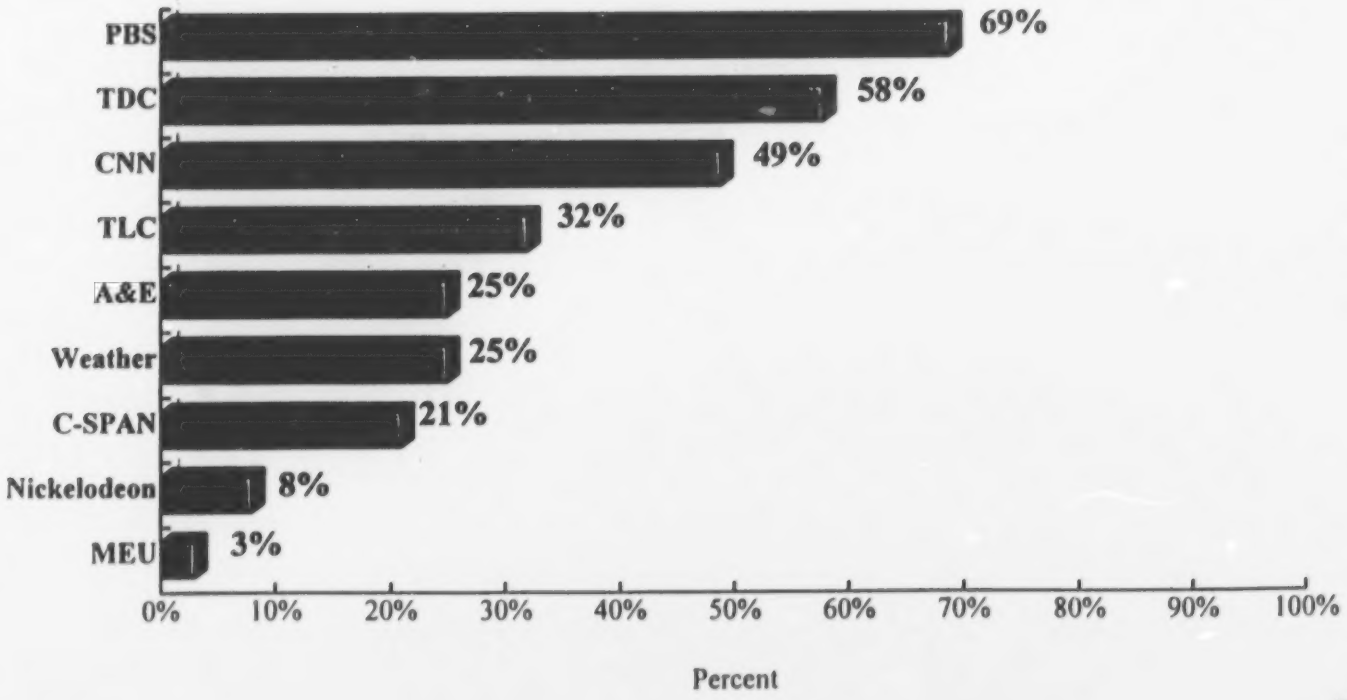
PBS, which has been providing commercial-free programming to schools for over 20 years, was the most frequently used channel, used by 69% of Cable in the Classroom users once a month or more. (See Figure 3.)

The most frequently used cable networks, which have been providing non-commercial, in-school programming for just over five years, were The Discovery Channel (TDC) used by 58% once a month or more and CNN used by 49% once a month or more. Some cable programming services, such as Mind Extension University (MEU) have relatively low cable carriage and would not have been available to many of the teachers and media coordinators surveyed.

Projections from the survey data to all U.S. teachers and media coordinators in schools connected to cable indicate that The Discovery Channel programming was used at least once a month by 34% of all teachers and media coordinators [.58 x .58] and CNN was used in schools at least once a month by 28% of all teachers and media coordinators [.49 x .58]. Among the more specialized cable networks, a surprisingly high 15% of U.S. teachers and media coordinators used The Weather Channel once a month or more, and 12% used C-SPAN once a month or more.

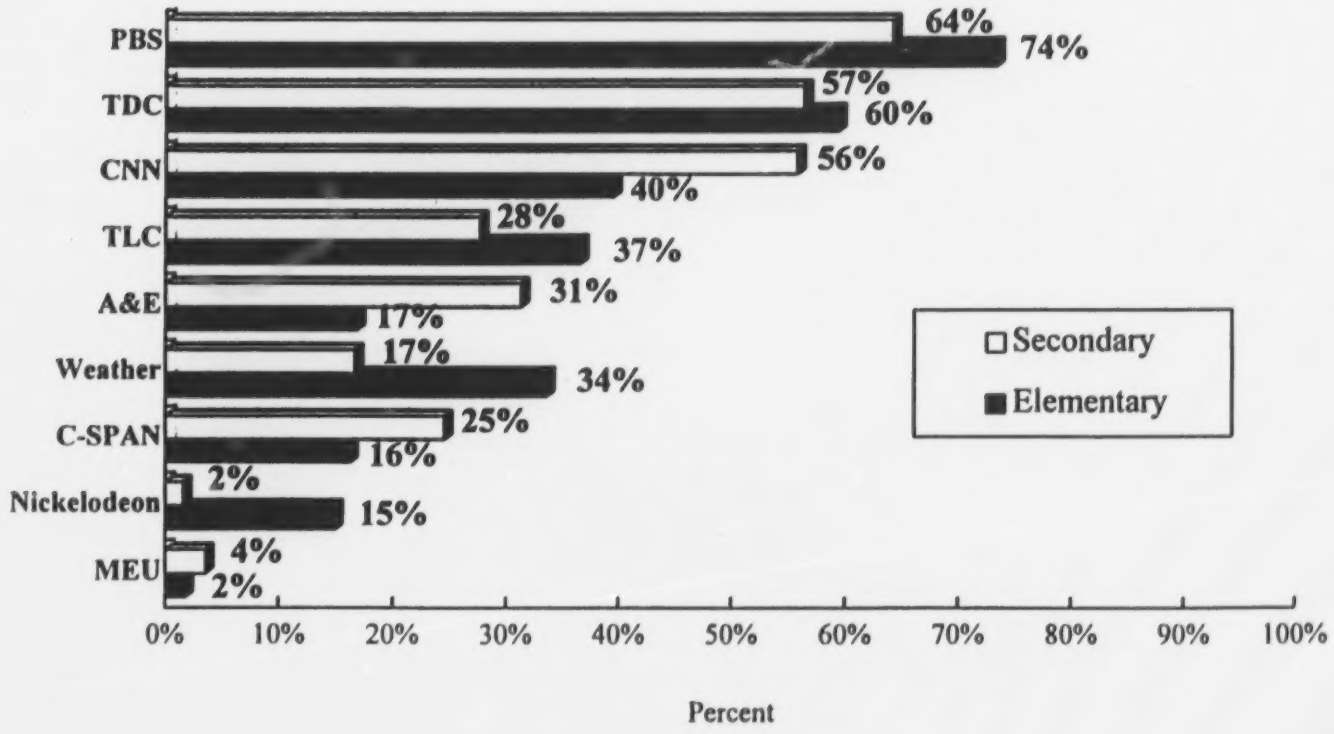
As shown in Figure 4, CNN was used more frequently in secondary schools than at the elementary level, though 40% elementary usage of CNN is quite high. The Learning Channel, The Weather Channel and Nickelodeon were used more frequently in elementary schools while Arts & Entertainment and C-SPAN were used more frequently in secondary schools.

Figure 3.
Cable in the Classroom programming used
at least once a month during this school year
(Teachers and Media Coordinators)



BEST COPY AVAILABLE

Figure 4.
Cable in the Classroom programming used
at least once a month during this school year
(Teachers and Media Users)



MTA EMCI
COMMUNICATIONS CONSULTANTS

4. Barriers to Usage of Electronic In-School Services

Educators were asked to what extent the following nine factors were barriers against greater usage of five electronic in-school services:

1. Lack of knowledge about service
2. Lack of workshops or training
3. Lack of time to learn how to use
4. Lack of access to equipment
5. Lack of access to telephone, cable or data line in your classroom
6. Lack of class time for use
7. Lack of relevance to the curriculum
8. Lack of motivation on your part (or, if media coordinator, on the part of teachers)
9. Lack of funds for school to purchase service

While barriers to usage exist for all of the electronic in-school services, Cable in the Classroom users encountered fewer barriers overall. For example, only 60% of teachers and media coordinators felt that lack of training and workshops, lack of time to learn how to use, lack of access to telephone, cable or data line in classroom, and lack of class time for use were barriers to greater usage of Cable in the Classroom (see Figure 5). Only some 40% felt that lack of relevance to the curriculum and lack of motivation on teachers' part were barriers to greater usage of Cable in the Classroom.

Comparative importance of the nine barriers to usage are shown in Figure 6 for online services, Internet, Cable in the Classroom and computers, laserdisc or CD-ROM. Lack of knowledge about the service, lack of training and workshops, lack of time to learn how to use, lack of access to equipment, and lack of phone, cable and data lines in the classroom were barriers to usage of online services and Internet for approximately 80% of teachers and media coordinators, compared to 50% to 60% for Cable in the Classroom. Except for lack of training and workshops, these barriers were also greater for computers than for Cable in the Classroom. Lack of class time was about the same barrier for the four electronic services.

Principals and district administrators reacted similarly to barriers to usage, as shown in Figure 7. Principals and administrators felt that seven of the nine factors, including lack of funds for school to purchase service, were less of a barrier to greater usage for Cable in the Classroom than for online services, Internet and computers.

MTA EMCI

Figure 5.
Barriers to Usage: Teachers/Media Coordinators
(major or somewhat of a barrier)

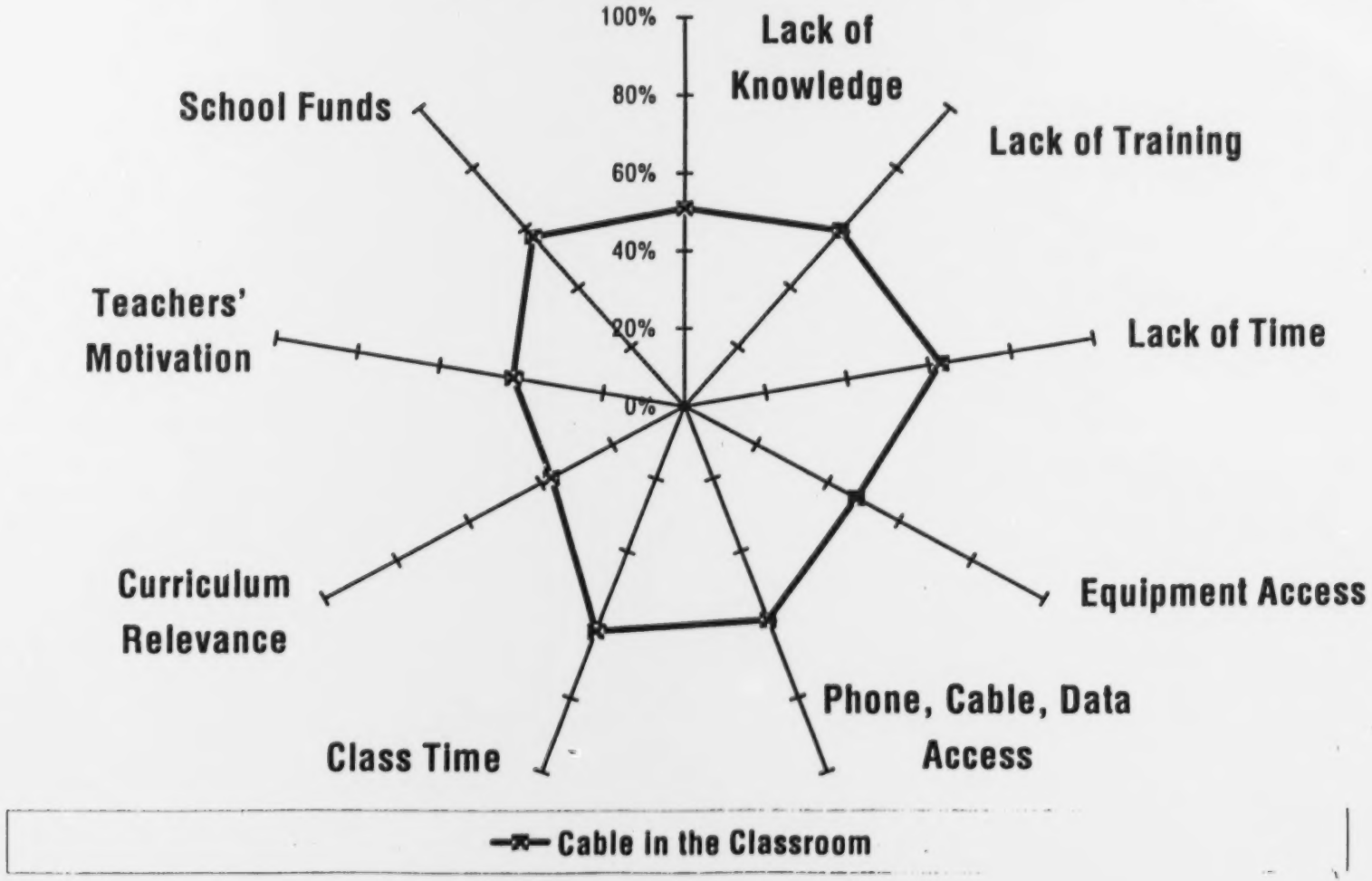
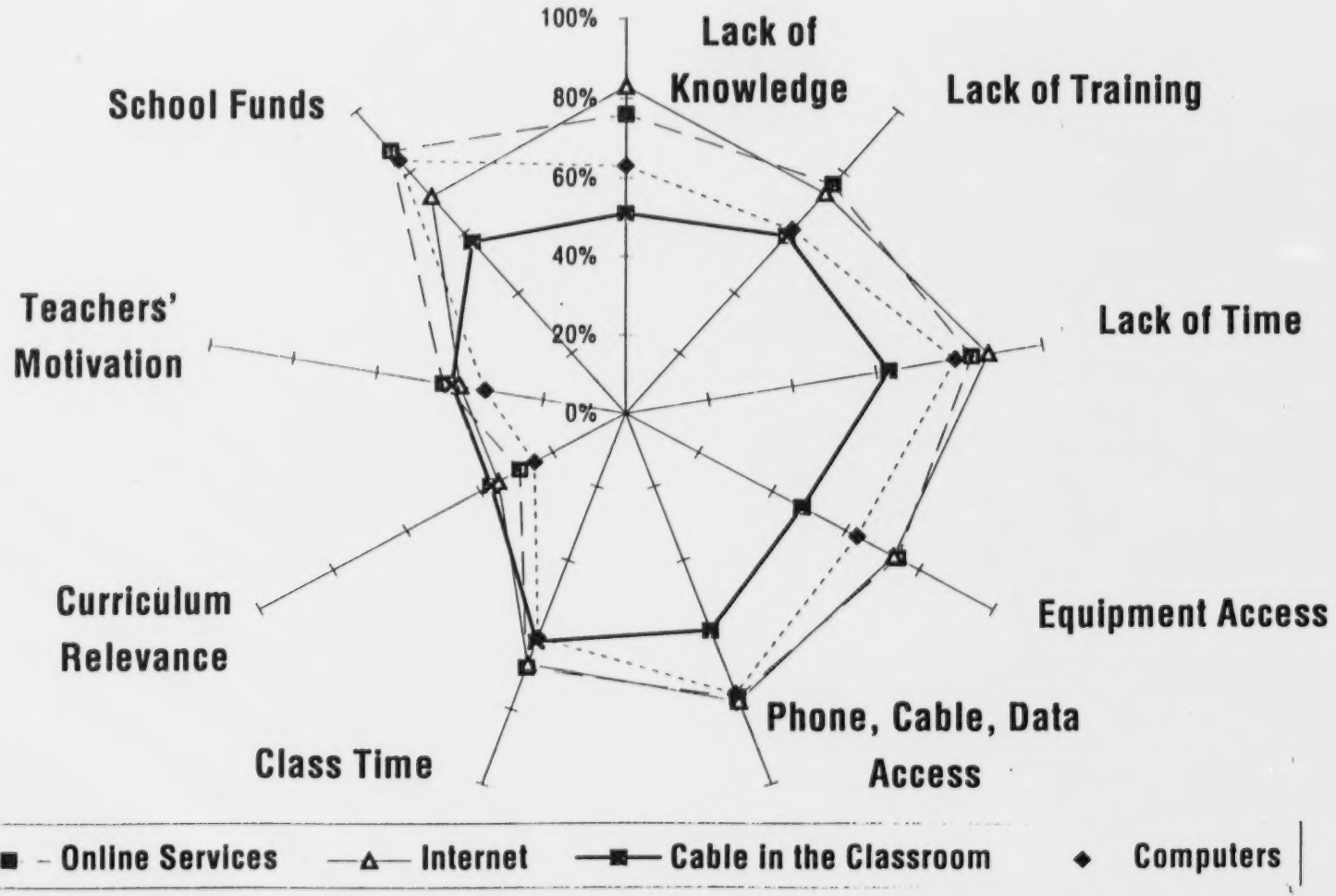


Figure 6.
Barriers to Usage: Teachers/Media Coordinators
(major or somewhat of a barrier)



5. Ease of Use, Effectiveness and Training

Teachers and media coordinators felt that Cable in the Classroom was easier to use than online services, Internet and computers. A high 84% of teachers and media coordinators said that Cable in the Classroom was "very or somewhat" easy to use as a teaching tool (see Figure 8), while 62% felt that computers were easy to use as a teaching tool, and only 34% and 25% felt that online services and Internet were easy to use.

Cable in the Classroom was also considered to be more effective for instruction to a whole class of students than online services, Internet and computers. While 76% said that Cable in the Classroom was "very or somewhat" effective for instruction to a whole class of students, 66% said computers were effective and 44% and 34% said online services and Internet were effective for teaching a whole class of students.

Teachers and media coordinators have had less exposure to training and workshops for Cable in the Classroom than for computers, online services and Internet. As shown in Figure 9, 81% of teachers and media coordinators who used computers had attended a workshop or received training in computers, and 56% and 51% of users had attended workshops or received training for Internet and online services. Only 22% of Cable in the Classroom users had attended a workshop or received training for Cable in the Classroom.

Figure 7.
Barriers to Usage: Principals/Administrators
(major or somewhat of a barrier)

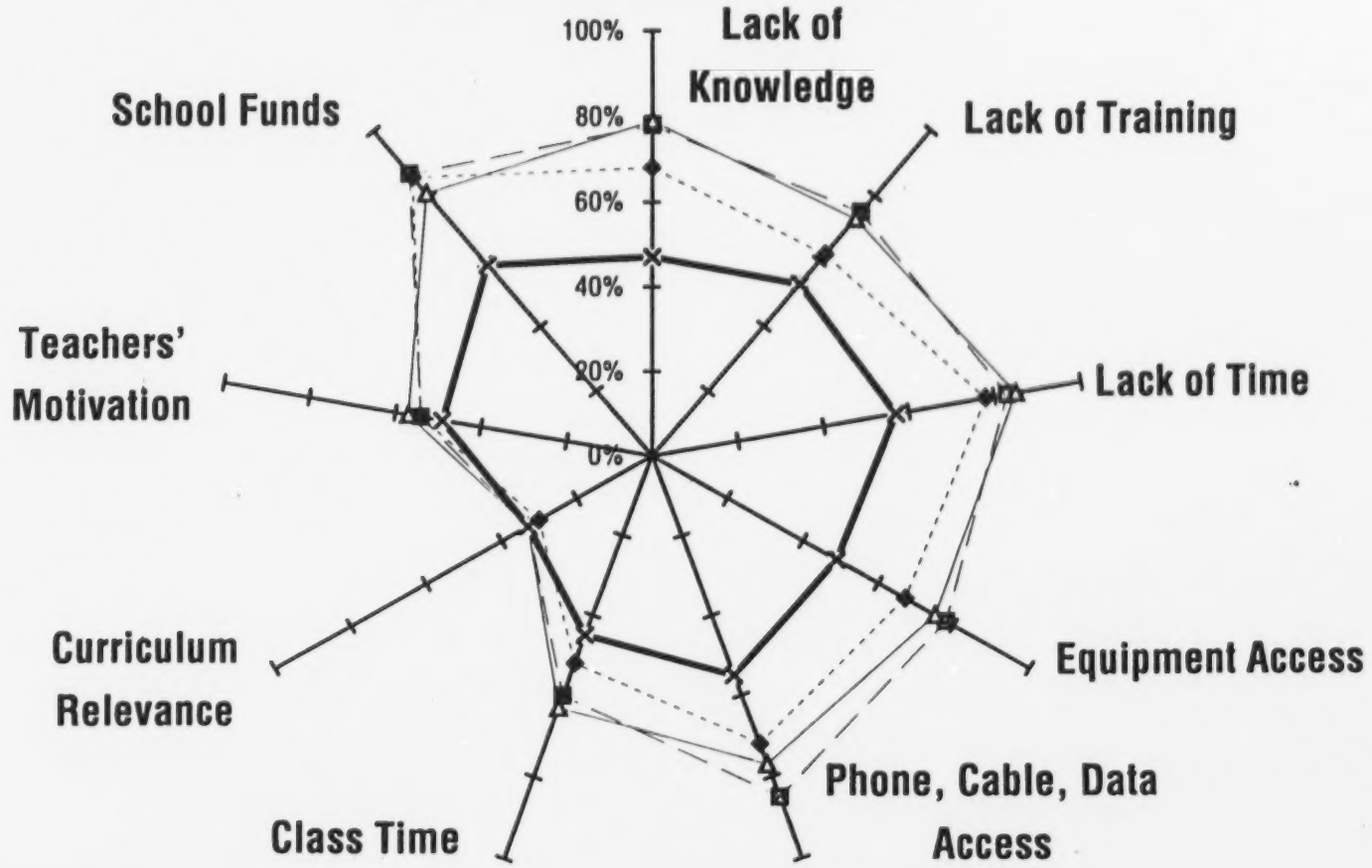


Figure 8.
Ease of Use and Effectiveness: Teachers and Administrators
(very or somewhat)

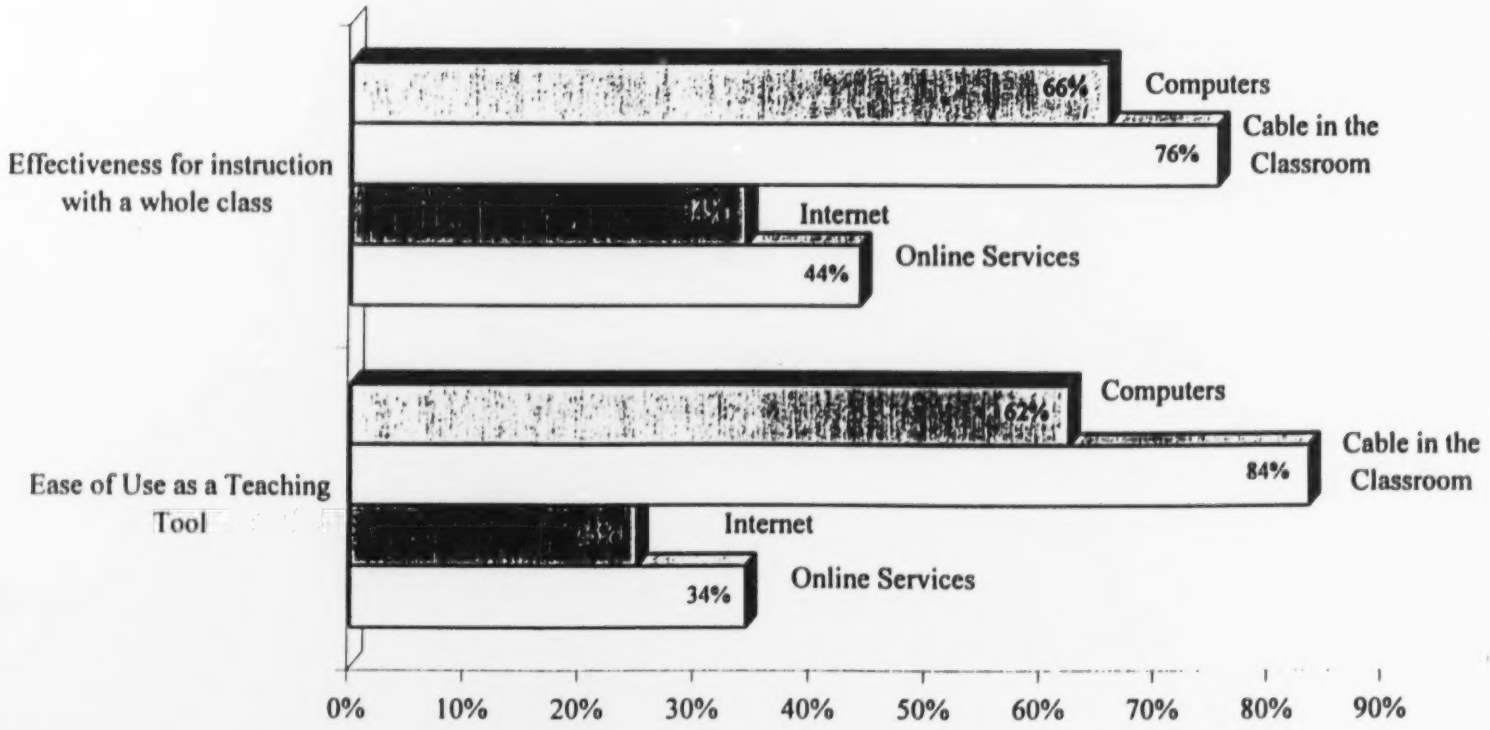
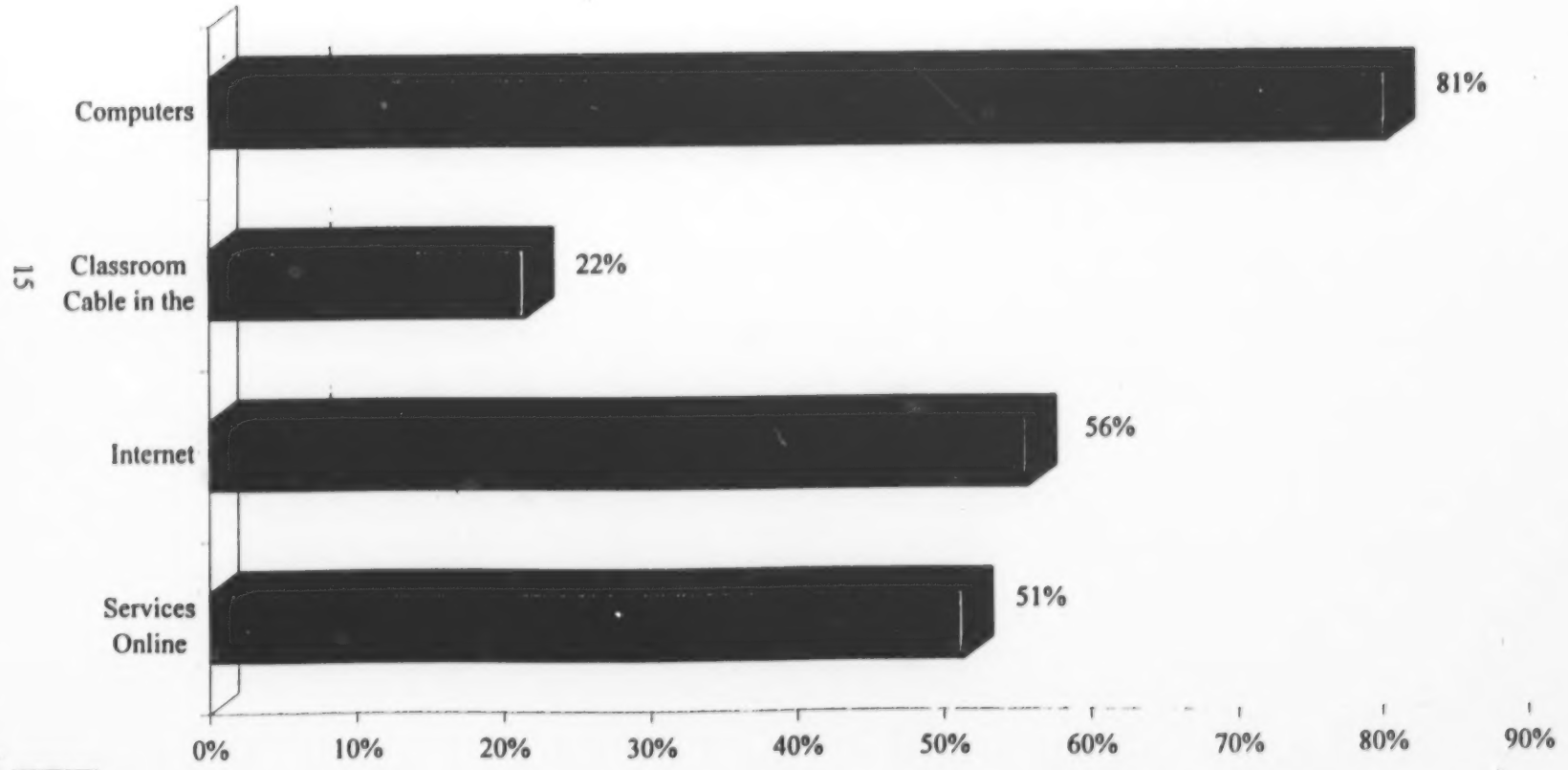


Figure 9.
Attended Workshop or Training



6. Agree/Disagree Attitudinal Statements

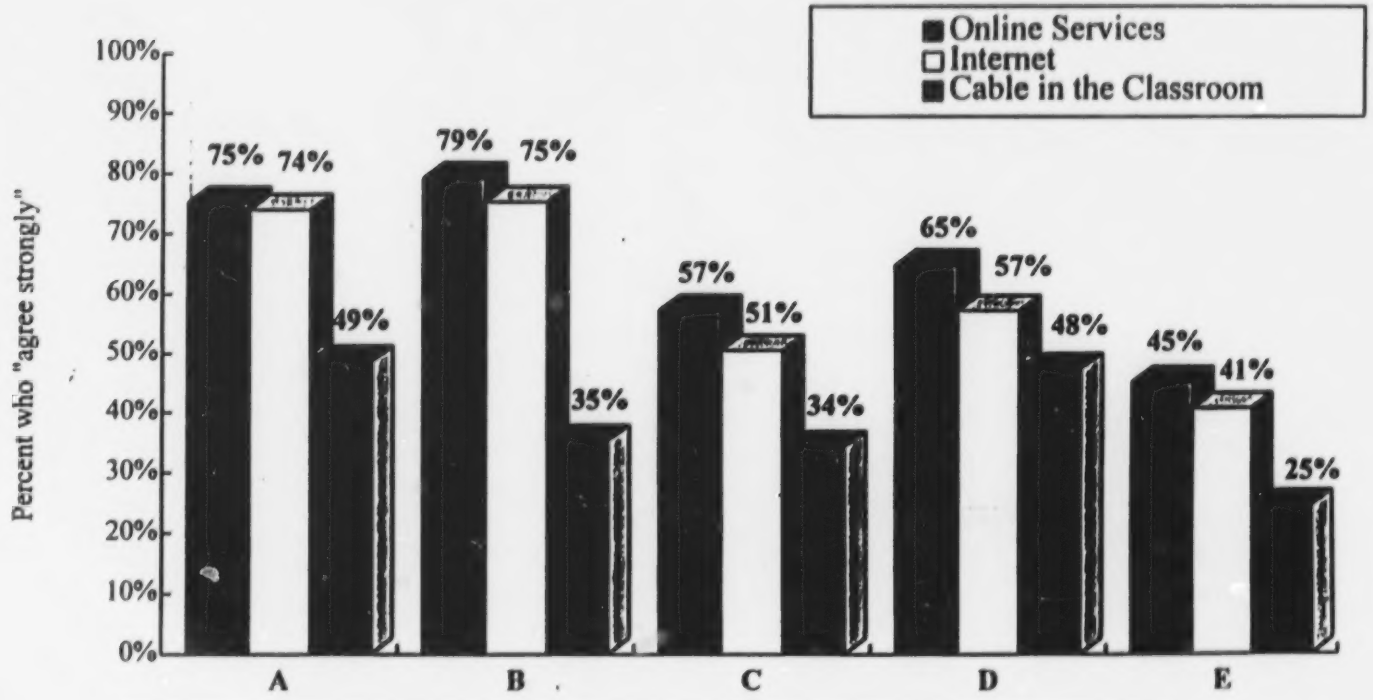
When asked to agree or disagree with a series of attitudinal statements, educators revealed strongly positive images of, and perceptions about online services and Internet and moderately positive images of Cable in the Classroom.

Three-fourths of teachers and media coordinators agreed strongly that online services and Internet "prepare young people for the information age" while 49% agreed strongly that Cable in the Classroom prepares young people for the information age (see Figure 10). Over 50% agreed strongly that online services and Internet "support schools and teachers through community service" while 34% agreed strongly that Cable in the Classroom supports schools and teachers through community service.

Teachers and media coordinators also had more positive attitudes toward online services and Internet than Cable in the Classroom in terms of exchanging information between schools and learning centers, assisting in professional development, and facilitating technology recommendations and budget planning.

Principals and district administrators, when asked the same series of agree/disagree statement, showed comparable attitudes to teachers and media coordinators (see Figure 11). For example, over 85% of principals and administrators agreed strongly that online services and Internet "can be used to exchange information between schools and learning centers" while 53% agreed strongly with this statement for Cable in the Classroom.

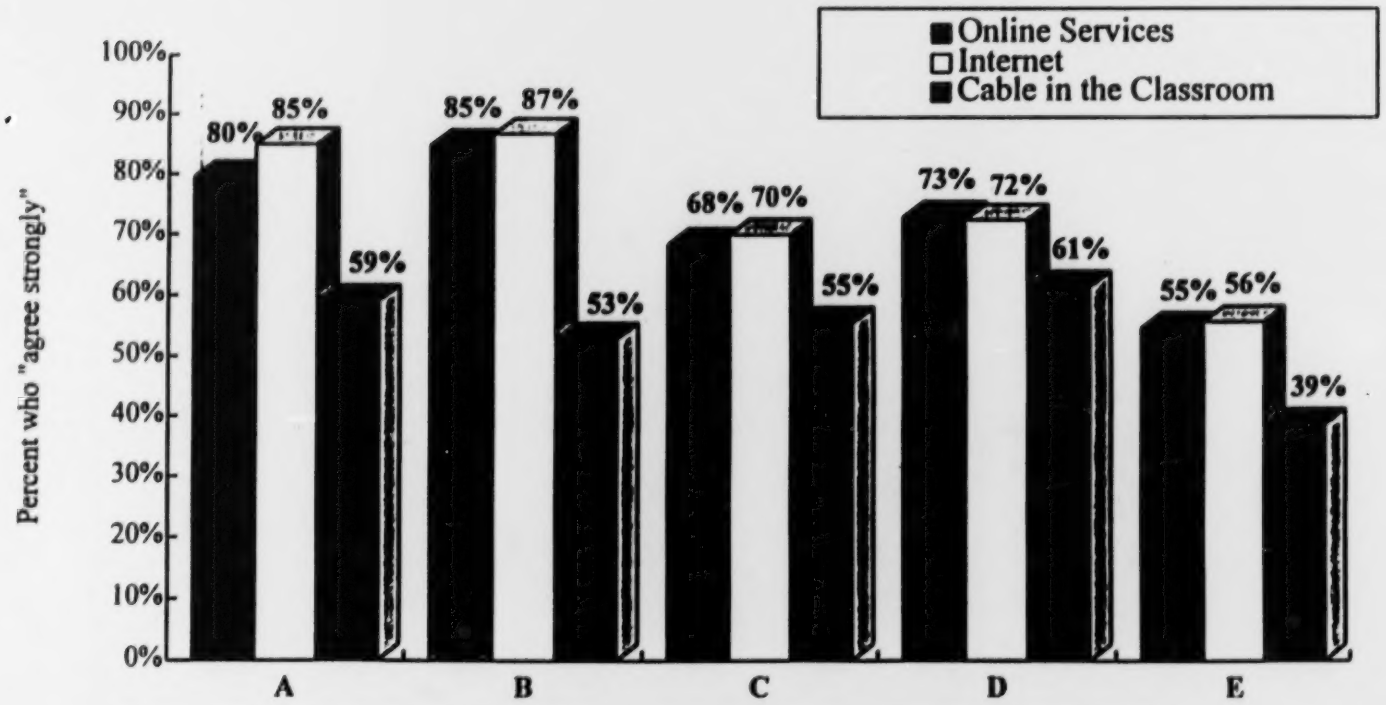
Figure 10.
Agree/Disagree Statements
(Teachers and Media Coordinators)



A = Prepares young people to participate in information age
B = Exchanges information between schools and learning centers
C = Supports schools and teachers through community services
D = Assists in professional development of teachers and admins.
E = Facilitates technology recommendations and budget planning

MTA EMCI
COMMUNICATIONS CONSULTANTS

Figure 11.
Agree/Disagree Statements
(Base = Principals and Administrators)



A = Prepares young people to participate in information age
B = Exchanges information between schools and learning centers
C = Supports schools and teachers through community services
D = Assists in professional development of teachers and admins.
E = Facilitates technology recommendations and budget planning

MTA EMCI
COMMUNICATIONS CONSULTANTS

7. Strengths of Using Cable in the Classroom

When asked the strengths of using Cable in the Classroom programming, users gave the following comments:

Table 1.
Strengths of Using Cable in the Classroom

	Cable in the Classroom Users Mentioning
• Enhances and enriches the curriculum	16%
• Stimulates visual learning	13%
• Offers up-to-date information	9%
• Serves as a teaching tool	9%
• Source of information	8%
• Provides access to information technology	7%
• Stimulates students' interest and attention	6%

BEST COPY AVAILABLE

MTA EMCI